AIR QUALITY BUREAU
ATTN: Application Log In
7900 Hickman Rd., Suite 1
Windsor Heights, IA 50324

AIR CONSTRUCTION PERMIT APPLICATION

FORM MI-2: Modeling Information (Emission Source Characteristics)

Please see instructions on reverse side

Company Name:	

TABLE 1. SUMMARY OF EXISTING STACK/VENT EMISSION SOURCES

(1) Emission Point ID Number	(2) Stack Height (feet)	(3) Stack Size (inches)	(4) Exhaust Temperature (ºF)	(5) Discharge Style	(6) Exhaust Flow Rate (acfm)	(7) Operating Hours	(8) Air Pollutant Emission Rate (lbs/hr) (estimated actual emission rate)				
							PM_{10}	NO_x	SO_2	CO	Lead

TABLE 2. SUMMARY OF EXISTING FUGITIVE EMISSION SOURCES (PSD PROJECTS ONLY)

(9) Source ID Number	(10) Source Description	(11) Dimensions (feet) (Length x Width x Height)	(12) Air Pollutant Emission Rate (lbs/hr) (estimated actual emission rate)				
			PM_{10}	NO_x	SO_2	CO	Lead

Instructions for Form MI-2

This form is designed to provide the review engineer and dispersion modeler with information on the emission characteristics of each existing emission unit/point and fugitive source located at the facility. This information may be used by the DNR to perform air dispersion modeling analyses or to review air dispersion modeling analyses submitted with the permit application or requested by the DNR.

NOTE: Whether you are submitting the construction permit application in hardcopy, by email, or by SPARS, the application is not considered complete unless this form is completed.

Fill in your company name. **If an air emission source emits VOCs/HAPs only, you do not need to include that emission source in this form.** VOCs and HAPs are not modeled at this time.

Table 1. Summary of Stack/Vent Emission Sources:

1. Provide the identification number of the emission point (stack or vent).
2. Provide the height of the emission point (stack or vent) above the ground.
3. Provide the stack opening size. For a circular stack, this is the diameter of the opening. For a rectangular or square shaped stack, this is the length and width of the opening.
4. Provide the exhaust temperature in degrees Fahrenheit.
5. Provide the type of discharge by using the symbols below:
   - V (Vertical, without rain cap, or with un-obstructing rain cap)
   - VR (Vertical, with obstructing rain cap)
   - H (Horizontal discharge)
   - D (Downward discharge; for example, a goose neck stack)
   - I (Internal; the emission unit does not vent directly to the atmosphere, but vents into a building)
6. Provide the exhaust flow rate in actual cubic feet per minute. Use the average for the last two years of operation.
7. Provide the actual daily/quarterly/annual hours of operation, as appropriate. Use the average for the last two years of operation. If no information is given, the source will be assumed to operate for 8760 hours/year.
8. Provide the estimated actual emission rate in **pounds per hour** for all pollutants emitted by this emission point. Estimated actual emissions are based on either stack testing data approved by the Department, or emissions calculated in accordance with IAC 567 22.5(1)"n"(2) using emission factors approved by the Department. At the Department's discretion, "normal source operation" may mean operation at the unit's maximum rated capacity (see IAC 567 22.5(1)"n"(3) and 22.5(1)"l").

Table 2. Summary of Fugitive Emission Sources:

9. Fugitive emissions are those emissions that cannot reasonably be made to pass through a stack or vent or equivalent opening. Examples include coal piles, unpaved roads, etc. Fugitive emission sources only need to be included in this form for Prevention of Significant Deterioration (PSD) projects.

   Assign an identification number to each fugitive source. It can be any number, as long as it is different from the emission point numbers and consistent with the numbers submitted in other permit applications, including operating permit application. If you have more fugitive emission sources than can fit on this form, attach a list (labeled MI2-7A) to this form.
10. Describe the fugitive emission source, such as a coal pile or unpaved road.
11. Provide the dimensions of the fugitive emission source. This could be the area for a coal pile, or the length of an unpaved road.
12. Provide the estimated actual emission rate in **pounds per hour (lbs/hr)**, using Department-approved emission factors, for all pollutants emitted by this fugitive emission source.